

## Complete Summary

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### GUIDELINE TITLE

Practice parameters for the evaluation of chronic insomnia.

### BIBLIOGRAPHIC SOURCE(S)

American Academy of Sleep Medicine. Practice parameters for the evaluation of chronic insomnia. Sleep 2000 Mar 15;23(2):237-41. [40 references]

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Chronic insomnia

### GUIDELINE CATEGORY

Diagnosis  
 Evaluation

### CLINICAL SPECIALTY

Psychiatry  
 Sleep Medicine

### INTENDED USERS

Allied Health Personnel  
 Physicians

### GUIDELINE OBJECTIVE(S)

To present recommendations for the clinical assessment of patients complaining of insomnia.

Note: the intent is not to present treatment options directly, but rather to present the evidence for the clinical assessment of insomnia which, however, may affect diagnosis and treatment decisions.

## TARGET POPULATION

Individuals with chronic insomnia

## INTERVENTIONS AND PRACTICES CONSIDERED

1. Screening for symptoms of insomnia during health examinations, such as restless legs and periodic limb movements; respiratory distress, including snoring, dyspnea, choking, and gasping; nocturnal panic attacks; pain; headaches; gastro-esophageal reflux disease; and numerous other nocturnal events/symptoms
2. Detailed sleep history (including psychologic, medical, and medication history) and physical examination
3. Reports from bed partners
4. Assessment of daytime consequences, using the Stanford Sleepiness Scale, Epworth Sleepiness Scale, Multiple Sleep Latency Tests/pupillometry assessment, and neuropsychological assessment (such as, vigilance/concentration, motor speed and accuracy, memory, and reasoning)
5. Self-report assessment devices, such as sleep logs and questionnaires
6. Psychiatric and psychological assessments including the use of the Minnesota Multiphasic Personality Inventory and Profiles of Mood States, and other mood scales
7. Technical devices
  - Polysomnography
  - Actigraphs and other sleep assessment devices, such as portable recorders and static-charge-sensitive beds

## MAJOR OUTCOMES CONSIDERED

- Polysomnographic measures, such as sleep efficiency, sleep latency, total sleep time
- Psychological measures, such as the Minnesota Multiphasic Personality Inventory (MMPI) and/or the Profile of Mood States
- Performance measures, such as reaction time, vigilance, memory

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A literature search (Medline 1966-1997, U.S. National Library of Medicine) of major topics relevant to the evaluation and diagnosis of insomnia was conducted. This search focused on controlled studies in peer-reviewed journals, which provided information regarding the relationship between specific diagnostic or evaluative processes and outcome. See Appendix A of the original guideline for list of major search terms, inclusion criteria and search results (number of articles identified within specific category). Review papers, commentary, case studies, pediatric populations, treatment investigation/drug trials, foreign language reports and studies which pertain only to polysomnographic or actigraphic evaluation were excluded, except where specifically noted.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Recommendation Grades

A (Evidence Level I)

- Randomized well-designed trials with low-alpha & low-beta errors\*

B (Evidence Level II)

- Randomized trials with high-beta errors\*

C (Evidence Level III)

- Nonrandomized controlled or concurrent cohort studies

C (Evidence Level IV)

- Nonrandomized historical cohort studies

C (Evidence Level V)

- Case series

\* Alpha error refers to the probability (generally set at 95% or greater) that a significant result (e.g.,  $p < 0.05$ ) is the correct conclusion of the study or studies. Beta error refers to the probability (generally set at 80% or 90% or greater) that a nonsignificant result (e.g.,  $p > 0.05$ ) is the correct conclusion of the study or studies. The estimation of beta error is generally the result of a power analysis. The power analysis includes a sample size analysis which projects the size of the

study population necessary to ensure that significant differences will be observed if actually present.

## METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

## DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

When scientific data were insufficient or inconclusive, recommendations were based on consensus opinion.

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Levels of Recommendation

Standard

- This is a generally accepted patient-care strategy which reflects a high degree of clinical certainty. The term standard generally implies the use of Level I Evidence, which directly addresses the clinical issue, or overwhelming Level II Evidence.

Guideline

- This is a patient-care strategy which reflects a moderate degree of clinical certainty. The term guideline implies the use of Level II Evidence or a consensus of Level III Evidence.

Option

- This is a patient-care strategy which reflects uncertain clinical use. The term option implies either inconclusive or conflicting evidence or conflicting expert opinion.

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The Board of Directors of the American Academy of Sleep Medicine approved these recommendations.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

Recommendations are given as standards, guidelines, or options, and unless otherwise specified, are supported by Level II to Level V evidence according to the definitions given at the end of the Major Recommendations field.

#### Evaluation/Diagnosis

1. The healthcare practitioner should screen patients for symptoms of insomnia during health examinations (Sateia, et al., 2000, sections 1.0, 3.2, 3.4, 7.2, and Table 2) (Standard).
2. An in-depth sleep history is essential in identifying the cause of insomnia. Additionally a physical examination is an important element in the evaluation of insomnia patients with medical symptoms (Sateia, et al., 2000, sections 4.1, 4.2, 4.5, 4.8, 5.0, 5.1, Table 3, Table 11, and Glossary) (Standard).

The following elements should be included in the sleep history or considered with reference to examination findings in order to help differentiate between a primary and a secondary diagnosis of insomnia.

- Symptoms of heightened arousal
  - Symptoms or a history of depression, anxiety, obsessive compulsive disorder, or other major psychological symptomatology
  - Symptoms of restless legs syndrome and periodic limb movement disorder
  - Sleep/wake schedule disorders
  - Snoring and other symptoms of sleep apnea
  - Symptoms or a history of drug or alcohol abuse
  - Current medication use
3. Polysomnography is not indicated for the routine evaluation of chronic insomnia. However, symptoms of insomnia do not exclude polysomnographic evaluation in assessing the complaint. There should be a valid indication and a clear rationale, based upon specific elements of the history, to support use of polysomnographic evaluation (Sateia, et al., 2000, sections 4.2 and 6.1) (Standard).
  4. Instruments which are helpful in the evaluation and differential diagnosis of insomnia, include self-administered questionnaires, at-home sleep logs, symptom checklists, psychological screening tests, and bedpartner interviews (Sateia, et al., 2000, sections 4.3, 4.4.1, 4.6, Tables 7, 8, and 9) (Guideline).
  5. The multiple sleep latency test is not routinely indicated for the evaluation of insomnia (Sateia, et al., 2000, sections 4.4.1 and 4.4.2) (Guideline).

6. There is insufficient evidence to make recommendations about the diagnostic role, effectiveness or reliability of portable sleep studies, actigraphy, and static charge sensitive beds in the assessment of insomnia. (Sateia, et al., 2000, section 6.2)

#### Definitions:

##### Recommendation Grades

##### A (Evidence Level I)

- Randomized well-designed trials with low-alpha & low-beta errors\*

##### B (Evidence Level II)

- Randomized trials with high-beta errors\*

##### C (Evidence Level III)

- Nonrandomized controlled or concurrent cohort studies

##### C (Evidence Level IV)

- Nonrandomized historical cohort studies

##### C (Evidence Level V)

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##### Levels of Recommendation

##### Standard

- This is a generally accepted patient-care strategy which reflects a high degree of clinical certainty. The term standard generally implies the use of Level I Evidence, which directly addresses the clinical issue, or overwhelming Level II Evidence.

##### Guideline

- This is a patient-care strategy which reflects a moderate degree of clinical certainty. The term guideline implies the use of Level II Evidence or a consensus of Level III Evidence.

#### Option

- This is a patient-care strategy which reflects uncertain clinical use. The term option implies either inconclusive or conflicting evidence or conflicting expert opinion.

#### CLINICAL ALGORITHM(S)

An algorithm for the evaluation of insomnia is provided in the companion technical review.

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

In most cases the conclusions are based on evidence from controlled studies that were published in peer-reviewed journals. When scientific data are insufficient or inconclusive, this is identified and consensus opinion may be used to support the available evidence. The type of evidence supporting each recommendation is identified in the "Major Recommendations" field.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

Improved clinical evaluation and diagnosis of chronic insomnia.

Subgroups Most Likely to Benefit:

Elderly and women may be at heightened risk for the development of insomnia complaints.

#### POTENTIAL HARMS

Not stated

### QUALIFYING STATEMENTS

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These practice parameters define principles of practice that should meet the needs of most patients in most clinical situations. These guidelines should not, however, be considered inclusive of all proper methods of care or exclusive of other methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific care must be made by the practitioner in light of the individual circumstances presented by the patient and the available diagnostic and treatment options and resources.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Living with Illness

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

American Academy of Sleep Medicine. Practice parameters for the evaluation of chronic insomnia. Sleep 2000 Mar 15;23(2):237-41. [40 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2000

### GUIDELINE DEVELOPER(S)

American Academy of Sleep Medicine - Professional Association

### SOURCE(S) OF FUNDING

American Academy of Sleep Medicine

### GUIDELINE COMMITTEE



## Standards of Practice Committee

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Names of Committee Members: Andrew Chesson, Jr; Kristyna Hartse; W. McDowell Anderson; David Davila; Stephen Johnson; Michael Littner; Merrill Wise; Jose Rafecas.

### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All members of the American Academy of Sleep Medicine's Standards of Practice Committee and Board of Directors completed detailed conflict-of-interest statements and were found to have no conflicts of interest with regard to this subject.

### GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time.

### GUIDELINE AVAILABILITY

Print copies: Available from the Standards of Practice Committee, American Academy of Sleep Medicine, One Westbrook Corporate Center, Suite 920, Westchester, IL 60154. Web site: [www.aasmnet.org](http://www.aasmnet.org).

### AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Sateia MJ, Doghramji K, Hauri PJ, Morin CM. Evaluation of chronic insomnia. An American Academy of Sleep Medicine review. Sleep 2000 Mar 15; 23(2):243-308.

Print copies: Available from the Standards of Practice Committee, American Academy of Sleep Medicine, One Westbrook Corporate Center, Suite 920, Westchester, IL 60154. Web site: [www.aasmnet.org](http://www.aasmnet.org).

### PATIENT RESOURCES

None available

### NGC STATUS

This summary was completed by ECRI on December 19, 2000. The information was verified by the guideline developer on January 15, 2001.

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The logo for FIRSTGOV, with "FIRST" in blue and "GOV" in red, and a small red star above the "I".

